

Application No. 09/667,489  
Reply to Office Action dated December 23, 2003

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

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1.-4. (Cancelled)

5. (Withdrawn) A method of performing dialysis, comprising selecting a patient suffering from chronic acidosis, and performing dialysis on the patient with a dialysate according to any one of claims 1-4.

6. (Cancelled)

7. (Withdrawn) A method of performing dialysis, comprising selecting a patient that is heparin-free, and maintaining that patient in a heparin free state while performing dialysis on that patient with a dialysate according to any one of claims 1-4.

8. (Withdrawn) A method of increasing the re-use of dialyzers, comprising performing dialysis on a patient with a dialysate according to any one of claims 1-4.

9. (Withdrawn) A method of increasing the dose of dialysis during a dialysis treatment, comprising performing dialysis with a dialysate according to any one of claims 1-4.

10. (New) A method of performing hemodialysis on a patient in need thereof, wherein the method comprises:

a) performing the hemodialysis in the absence of a systemic administration of an anticoagulant to the patient; and

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b) performing the hemodialysis in a dialyzer with a dialysate composition comprising citrate at a concentration ranging from 2.4 to 20 mEq/L, calcium at a concentration ranging from 2.5 to 5 mEq/L and magnesium at a concentration ranging from 1 to 2 mEq/L.

11. (New) The method of Claim 10 wherein the patient is suffering from acute kidney failure.

12. (New) The method of Claim 10 wherein the patient has an intolerance to heparin. *→ like 7*

13. (New) The method of Claim 12 wherein the intolerance is the result of the patient having an antibody to heparin. *→ like 7*

14. (New) The method of Claim 10 wherein the patient has a risk of bleeding from a systemic administration of an anticoagulant. *SACD*

15. (New) The method of Claim 10 wherein the anti-coagulant is heparin. *hep / like 7*

16. (New) The method of Claim 10 wherein the hemodialysis results in an increased urea transfer from the patient's blood to the dialysate in comparison to the level of urea transfer obtained with dialysate compositions that do not contain citrate.

17. (New) The method of Claim 10 wherein the hemodialysis results in an increased level of bicarbonate concentration in the patient's blood in comparison to the level of bicarbonate concentration obtained with dialysate compositions that do not contain citrate.

18. (New) The method of Claim 10 wherein the hemodialysis results in an increased effective flow of the patient's blood through the dialyzer in comparison to the effective rate of blood flow obtained with dialysate compositions that do not contain citrate.

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19. (New) The method of Claim 10 wherein the dialysate composition further comprises a buffering anion selected from the group consisting of acetate, in the form of an acetate salt, and lactate, in the form of a lactate salt, or a mixture thereof, at a concentration ranging from about 0.01 to about 2.5 mEq/L.

20. (New) The method of Claim 10 wherein the dialysate composition further comprises sodium bicarbonate at a concentration ranging from about 25 to about 40 mEq/L.

21. (New) The method of Claim 10 wherein the dialysate composition further comprises sodium chloride at a concentration ranging from about 110 to about 140 mEq/L.

22. (New) The method of Claim 10 wherein the citrate is in the form of citric acid, sodium dihydrogen citrate, disodium hydrogen citrate, trisodium citrate, potassium dihydrogen citrate or dipotassium hydrogen citrate, or any mixture thereof.

23. (New) The method of Claim 10 wherein the hemodialysis results in an increased re-use of the dialyzer in comparison to the re-use of a dialyzer obtained with dialysate compositions that do not contain citrate.

24. (New) A method of performing hemodialysis on a patient in need thereof, wherein the method comprises:

- a) performing the hemodialysis in the presence of a systemic administration of a low-dose amount of an anticoagulant to the patient; and
- b) performing the hemodialysis in a dialyzer with a dialysate composition comprising citrate at a concentration ranging from 2.4 to 20 mEq/L, calcium at a concentration ranging from 2.5 to 5 mEq/L and magnesium at a concentration ranging from 1 to 2 mEq/L.

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25. (New) The method of Claim 24 wherein the patient is suffering from acute kidney failure.

26. (New) The method of Claim 24 wherein the anti-coagulant is heparin.

27. (New) The method of Claim 24 wherein the hemodialysis results in an increased urea transfer from the patient's blood to the dialysate in comparison to the level of urea transfer obtained with dialysate compositions that do not contain citrate.

28. (New) The method of Claim 24 wherein the hemodialysis results in an increased level of bicarbonate concentration in the patient's blood in comparison to the level of bicarbonate concentration obtained with dialysate compositions that do not contain citrate.

29. (New) The method of Claim 24 wherein the hemodialysis results in an increased flow of the patient's blood through the dialyzer in comparison to rate of blood flow obtained with dialysate compositions that do not contain citrate.

30. (New) The method of Claim 24 wherein the dialysate composition further comprises a buffering anion selected from the group consisting of acetate, in the form of an acetate salt, and lactate, in the form of a lactate salt, or a mixture thereof, at a concentration ranging from about 0.01 to about 2.5 mEq/L.

31. (New) The method of Claim 24 wherein the dialysate composition further comprises sodium bicarbonate at a concentration ranging from about 25 to about 40 mEq/L.

32. (New) The method of Claim 24 wherein the dialysate composition further comprises sodium chloride at a concentration ranging from about 110 to about 140 mEq/L.

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33. (New) The method of Claim 24 wherein the citrate is in the form of citric acid, sodium dihydrogen citrate, disodium hydrogen citrate, trisodium citrate, potassium dihydrogen citrate or dipotassium hydrogen citrate, or any mixture thereof.

34. (New) The method of Claim 24 wherein the hemodialysis results in an increased re-use of the dialyzer in comparison to the re-use of a dialyzer obtained with dialysate compositions that do not contain citrate.

35. A method of performing hemodialysis on a patient in need thereof, wherein the method comprises:

(a) performing the hemodialysis in the absence of a systemic administration of heparin to the patient; and

(b) performing the hemodialysis in a dialyzer with a dialysate composition comprising:

citrate at a concentration ranging from 2.4 to 20 mEq/L;

calcium at a concentration ranging from 2.5 to 5 mEq/L;

magnesium at a concentration ranging from 1 to 2 mEq/L;

a buffering anion selected from the group consisting of acetate, in the form of an acetate salt, and lactate, in the form of a lactate salt, or a mixture thereof, at a concentration ranging from about 0.01 to about 2.5 mEq/L;

sodium bicarbonate at a concentration ranging from about 25 to about 40 mEq/L;

and

sodium chloride at a concentration ranging from about 110 to about 140 mEq/L;

wherein the hemodialysis results in one or more of the following:

- (1) an increased urea transfer from the patient's blood to the dialysate;
- (2) an increased level of bicarbonate concentration in the patient's blood;
- (3) an increased effective flow of the patient's blood through the dialyzer; or
- (4) an increased re-use of the dialyzer,

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in comparison to the hemodialysis results obtained with dialysate compositions  
that do not contain citrate.

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